



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER - Governor
Gary Spackman - IDWR Director

March 16, 2015

Steve Hebdon
190 North Meadowview Drive
Arimo, ID 83214

RE: Delivery of Water to PIC/PMVCC Headgate

Dear Mr. Hebdon:

I recently received a joint letter from Portneuf Irrigating Company ("PIC") and Portneuf Marsh Valley Canal Company ("PMVCC") expressing some concerns about how water was delivered at their shared headgate last year. I've included a copy of the letter for your reference.

The letter asserts that the amount of water delivered in 2014 at the PIC/PMVCC shared headgate on the Portneuf River was based, in part, on instantaneous readings from flow meters within the PIC delivery system. According to the canal companies, your attempts to match the delivery at the river headgate to instantaneous readings from PIC's internal tracking system resulted in unexpected changes to the amount of water in the shared canal, which led to insufficient water delivered to PIC and shortages to PMVCC shareholders.

The new PIC pipeline has significantly reduced the amount of operational losses in the company's system, but has not eliminated losses altogether. One specific type of operational loss remains. According to PIC, individual water users have the ability to open valves at their properties at any time. When a water user opens a valve, it creates an immediate demand on the system and draws additional water out of the shared canal. When a water user closes a valve, it reduces the draw on the pipeline and leaves more water in the shared canal, which might continue on into the PMVCC system. This unused water is an operational loss for PIC and would be similar to water flowing into a stream or ditch at the tail end of a long canal.

If you attempt to set the river headgate based on instantaneous readings from the internal PIC tracking system, the moment a PIC patron opens his valve, PIC draws more water out of the shared canal than is being delivered into the canal under the PIC water rights. At that moment, the PIC pipeline begins to divert PMVCC storage water and causes a shortage on the PMVCC system.

A canal company must be able to anticipate future demand and provide water to its patrons within a reasonable time period. A canal company must also have the flexibility to meet the fluctuations in demand that occur over the course of a day. This will inevitably lead to some operational loss.

Consider, for example, a canal company that estimates a system demand of 100 cfs. If an unexpected rainstorm comes through the area, the actual demand may drop to 90 cfs, leading to some amount of water lost out the end of the canal system. This type of loss is coincident to operating a large canal system and is not considered waste under Idaho Code § 18-4302 or § 42-916.

PIC should be allowed to request a specific amount of water for delivery under its water rights. As long as the demand for water is reasonable (based on previous and future demand), you as the watermaster should not get involved in the instantaneous delivery to the PIC patrons or the readings on PIC's internal flow meters. As demand on the PIC system changes during the summer (grain crops finished or hay being cut), PIC will notify you that its delivery can be reduced. There will likely continue to be hourly and daily fluctuation in the instantaneous demand of the PIC system, which may lead to some operational loss.

Communication is the key to making this system work. PIC should monitor its own deliveries regularly so that the company can contact you when changes at the river headgate are appropriate. This contact may be once a day or less frequent if peak daily demand is holding steady. Knowing what the PIC delivery request is (and that it will not change multiple times throughout the day) will help the other canal companies in the Upper Portneuf schedule the deliveries to their shareholders.

During the 2015 irrigation season, please deliver the amount of water requested by PIC to its headgate on the Portneuf River. PIC should notify you of any changes to its requested delivery as demand changes throughout the season. If you observe unreasonable amounts of excess water in the system, please contact me and we can discuss whether an adjustment needs to be made to this delivery plan. Thank you for your ongoing efforts to deliver water in a fair and efficient manner.

Sincerely,



James Cefalo
(208) 525-7161

Cc: Tim Luke, IDWR Boise
Portneuf Marsh Valley Canal Co.
Portneuf Irrigating Co.

RECEIVED

FEB 25 2015

Department of Water Resources
Eastern Region

**PORTNEUF IRRIGATING COMPANY
AND
PORTNEUF MARSH VALLEY CANAL COMPANY,
LIMITED**

February 9, 2015

Mr. James Cefalo
Water Resources Program Manager
Eastern Regional Office
Idaho Department of Water Resources ("IDWR")
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Boise, ID 83402-1718

Via Email: james.cefalo@idwr.idaho.gov

RE: Delivery of Water in Water District 29 (Portneuf River)

Dear Mr. Cefalo:

Portneuf Irrigating Company ("PIC") and Portneuf Marsh Valley Canal Company, Limited ("PMVCC") share a single, common point of diversion ("POD") on the Portneuf River west of Lava Hot Springs and a joint canal ("Joint Canal") from the POD for several miles to the west and south until reaching the "Main Diversion" to the recently installed PIC's pipeline system (the "Pipeline"). The Pipeline replaced the PIC's Arimo Ditch and was first used in 2013.

As part of the Pipeline, PIC has installed transit time and mag meters (using models on IDWR's approved list) at all points from which PIC receives water from the Joint Canal, the instantaneous data from which is uploaded in real time to a website and also readable in real time at the Main Diversion ("Flow Data").

PIC routinely observes intra-day variations or swings in instantaneous flow rate of as much as five to eight cubic feet per second ("CFS") due to individual irrigators turning sprinklers on and off to move the same, as well as water meter accuracy which is estimated to be +/- 5%.

With the installation of the PIC Pipeline, PIC now has a completely "closed" pressurized system, meaning that water remains in the Joint Canal except to the extent that PIC irrigators open valves along the Pipeline and withdraw water. There are very few or no operating losses in the Pipeline itself. PIC operating losses are now primarily those relating to the impossibility of diverting in real time at the POD the exact instantaneous

demand of the Pipeline. Any PIC water diverted at the POD into the Joint Canal that is not used by the Pipeline remains in the Joint Canal.

For the past two years since the Pipeline has been used, District 29's watermaster (the "Watermaster") has had free access to the Flow Data both from the website and by physically going to the Main Diversion. From this Flow Data, we believe that the Watermaster (while well intended) has attempted to too tightly manage delivery of PIC's water into the Joint Canal at the POD based upon his observing our Flow Data readings.

Upon request by a water right holder and in order of priority date, we believe a watermaster's duty is to deliver and measure water at the water right holder's legally established points of diversion. It is not the duty of a watermaster to base diversions at legally established points of diversion upon flow measurements taken downstream from such points of diversion.

We have made available our Flow Data as a convenience to the Watermaster, but not as a basis for his adjusting diversions at our POD. Adjustments to diversions to us at our POD should be based upon our calls for water, not upon his or anyone else's observations of instantaneous snapshots in time from our Flow Data, which are subject to high variability as discussed above.

Our intent is not to waste water nor call for more water than we need. Our calls have been and will be based upon our estimated peak flow needs, including a small cushion for ditch losses in the Joint Canal and unexpected demands (PIC and PMVCC each have about 25 independent water users for whom it is difficult to always coordinate withdrawals). In essence, to the extent that more PIC water gets diverted into the Joint Canal than is being withdrawn by the Pipeline at any point in time, such extra water is really no different than normal operating losses from which all ditch systems suffer.

Absent allowing PIC in its judgment to call for delivery of water by the Watermaster to the POD, PMVCC water winds up subsidizing PIC's water withdrawals from the Joint Canal to the extent of Pipeline moment by moment withdrawals in excess of the amount diverted by the Water Master at the POD.

We respectfully request that IDWR provide written instructions to District 29 and its Watermaster clarifying and confirming a watermaster's duty to respond to priority calls for delivery at legally established points of diversion based upon the respective water right holders' request and not adjust the same until further instruction from the water right holders. To be more plain, we request that PIC and PMVCC, subject to the priority dates and limitations in our respective water rights, be allowed to call for our water to be delivered to our POD's based upon our estimated needs and not based upon the Watermaster's observations of our downstream Flow Data or other factors.

If you need any other information or have any questions, please contact us as provide below.

Respectfully submitted,

Portneuf Irrigating Company, an Idaho non-profit corporation

By: Randal Morris
Randal Morris
Vice President

Portneuf Marsh Valley Canal Company Limited,
An Idaho non-profit corporation

By: Tom Barnes
Tom Barnes, President

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